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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,045	07/14/2003	Souta Takeuchi	03500.017411.	5610
5514	7590	01/26/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			STEPHENS, JUANITA DIONNE	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,045

Applicant(s)

TAKEUCHI ET AL.

Examiner

Juanita D. Stephens

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed 7/14/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to because it appears that the letter "H" is missing from some of the reference numbers on Figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as

per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

On page 1, line 19 delete the extra space between "liquid,".

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Ink jet recording head and ink jet recording apparatus using ink jet recording head having low adhesion between the substrate and the discharge port forming member".

Claim Objections

4. Claims 1-8 are objected to because of the following informalities:

In claim 1, line 4 replace "the discharge energy" with --a discharge energy--.

In claim 1, line 15 replace "the upper part" with --an upper part--.

In claim 1, line 20 replace "the upper part" with --an upper part--.

In claim 3, lines 3-4 replace "the discharge energy" with --a discharge energy--.

In claim 3, line 13-14 replace "the upper part" with --an upper part--.

In claim 3, line 17-18 replace "the upper part" with --an upper part--.

In claim 5, line 6 replace "the discharge energy" with --a discharge energy--.

In claim 5, line 17 before the word "recording" insert --first--.

In claim 5, line 18 replace "the upper part" with --an upper part--.

In claim 5, page 45, line 2 before the word "electrical" insert --first--.

In claim 5, page 45, line 5 replace "the upper part" with --an upper part--.

In claim 5, page 45, line 10 replace "the discharge energy" with --a discharge energy--.

In claim 5, page 45, lines 23-24 replace "the upper part" with --an upper part--.

In claim 5, page 46, lines 1-2 replace "the upper part" with --an upper part--.

Claim 6 recite "the recording element protection section" and "the electrical circuit element protection section", however, there appear to be more than one "recording element protection section" and "electrical circuit element protection section. Therefore, claim 6 should be amended to recite the limitation similar to the recitation set forth in claim 8.

In claim 7, line 5 replace "the discharge energy" with --a discharge energy--.

In claim 7, page 47, line 3 replace "the upper part" with --an upper part--.

In claim 7, page 47, line 7 replace "the upper part" with --an upper part--.

In claim 7, page 47, line 10 replace "the discharge energy" with --a discharge energy--.

In claim 7, page 47, line 22 replace "the upper part" with --an upper part--.

In claim 7, page 47, line 27 replace "the upper part" with --an upper part--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaneko (US 6,474,790 B2).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kaneko discloses an ink jet recording apparatus (Fig. 25) comprising: 1) an ink jet recording head (H1001) including a substrate (H1100/H1110) (col 4, Ins 5-6, Ins 50-51; Fig. 4), 2) a plurality of recording elements (H1103) for generating the discharge energy for discharging ink droplets of recording liquid (col 4, Ins 52-54; Fig. 4) from at least a discharge port (H1107) (col 4, In 58; Fig. 4), the recording elements forming a recording element row arranged in a row on the substrate (as shown in Fig. 4), 3) a plurality of electrical circuit elements (transistors H1121) (col 11, Ins 5-20, Figs. 12 and

13) for driving the recording elements, the electrical circuit elements forming an electrical circuit element row arranged in a row adjacently to the recording element row on the substrate (as shown in Fig.12), 4) at least a conductive belt-like recording element protecting section (first anticavitation film H1126) for covering the upper part of the recording element row (col 10, Ins 51-54; Figs. 13 and 14), 5) at least a conductive belt-like electrical circuit element protecting section (second anticavitation film H1127) electrically connected with the recording element protecting section for covering the upper part of the electrical circuit element row (col 10, Ins 54-56; Figs. 13 and 14), 6) an inspection electrode pad (H1131) adapted to be electrically connected to the recording element protecting section and the electrical circuit element protecting section (col 11, Ins 1-5), 7) an electricity supply means for supplying the ink jet recording head with an electrical signal for driving the ink jet recording head (col 5, Ins 1-8), and 8) wherein the recording element protecting section and the electrical circuit element protecting section are an anti-cavitation film (col 10, Ins 51-56).

Allowable Subject Matter

7. Claims 5-8 would be allowed after correction as identified in the "claim objection" section is made.

8. The following is a statement of reasons for the indication of allowable subject matter:

The prior does not teach, suggest, or render obvious the combination of a first ink supply port provided on the substrate, recording elements forming a first recording element row arranged in a row on each side of the first ink supply port, electrical circuit

element forming a first electrical circuit element row arranged in a row outside the first ink supply port with respect to the first recording element row, a conductive belt-like first recording element protection section for covering the upper part of the first recording element row, a conductive belt-like first electrical circuit element protecting section electrically connected with the first recording element protecting section for covering the upper part of the first electrical circuit element row, at least a second ink supply port provided on the substrate, recording elements forming a second recording element row arranged in a row on each side of the second ink supply port, electrical circuit element forming a second electrical circuit element row arranged in a row outside the second ink supply port with respect to the second recording element row, a conductive belt-like second recording element protection section for covering the upper part of the second recording element row, a conductive belt-like second electrical circuit element protecting section electrically connected with the second recording element protecting section for covering the upper part of the second electrical circuit element row, a conducting section for electrically connecting the first electrical circuit element protecting section and the second electrical circuit element protection section to each other, and an inspection electrode pad adapted to be electrically connected to the conducting section, recited in claims 5 and 7

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Juanita D. Stephens". The signature is fluid and cursive, with the first name being the most prominent.

Juanita D. Stephens
Primary Examiner
Art Unit 2853

January 24, 2005